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* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America
NEWS 2 "Ask CAS" for self-help around the clock
NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the
present
NEWS 4 DEC 08 INPADOC: Legal Status data reloaded
NEWS 5 SEP 29 DISSABS now available on STN
NEWS 6 OCT 10 PCTFULL: Two new display fields added
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
NEWS 11 DEC 08 IMS file names changed
NEWS 12 DEC 09 Experimental property data collected by CAS now available
in REGISTRY
NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS 14 DEC 17 DGENE: Two new display fields added
NEWS 15 DEC 18 BIOTECHNO no longer updated
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer
available
NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS
databases
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19 DEC 22 ABI-INFORM now available on STN
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated
and searchable
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in
CA/CAPLUS
NEWS 22 FEB 05 German (DE) application and patent publication number format
changes
NEWS 23 MAR 03 MEDLINE and LMEADLINE reloaded
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 25 MAR 03 FRANCEPAT now available on STN

NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS INTER General Internet Information
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:11:22 ON 24 MAR 2004

=> file reg	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:11:38 ON 24 MAR 2004
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0
DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>

Uploading c:\program files\stnexp\queries\10645401.1

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 11:12:06 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 603 TO ITERATE

100.0% PROCESSED 603 ITERATIONS
SEARCH TIME: 00.00.01

2 ANSWERS

L2 2 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

155.42

155.63

FILE 'MARPAT' ENTERED AT 11:12:13 ON 24 MAR 2004

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FILE CONTENT: 1988-PRESENT (VOL 140 ISS 12) (20040319/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6696581 24 FEB 2004

DE 10317487 19 FEB 2004

EP 1389746 18 FEB 2004

JP 2004059557 26 FEB 2004

WO 2004015164 19 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new,
higher limits.

=> s l1 sss full

FULL SEARCH INITIATED 11:12:18 FILE 'MARPAT'

FULL SCREEN SEARCH COMPLETED - 1567 TO ITERATE

100.0% PROCESSED 1567 ITERATIONS

8 ANSWERS

SEARCH TIME: 00.00.07

L3 8 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

109.42

265.05

FILE 'CAPLUS' ENTERED AT 11:12:32 ON 24 MAR 2004

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FILE COVERS 1907 - 24 Mar 2004 VOL 140 ISS 13

FILE LAST UPDATED: 23 Mar 2004 (20040323/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L4 2 L2

=> s 13

L5 8 L3

=> d 14 fbib hitstr abs total

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:916027 CAPLUS

DN 136:200160

TI Orally-Effective, Long-Acting Sorbitol Dehydrogenase Inhibitors: Synthesis, Structure-Activity Relationships, and in Vivo Evaluations of Novel Heterocycle-Substituted Piperazino-Pyrimidines

AU Chu-Moyer, Margaret Y.; Ballinger, William E.; Beebe, David A.; Berger, Richard; Coutcher, James B.; Day, Wesley W.; Li, Jiancheng; Mylari, Banavara L.; Oates, Peter J.; Weekly, R. Matthew

CS Departments of Cardiovascular and Metabolic Disease and Drug Metabolism Development, Pfizer Global Research and Development, Groton Laboratories, Groton, CT, 06340, USA

SO Journal of Medicinal Chemistry (2002), 45(2), 511-528

CODEN: JMCMAR; ISSN: 0022-2623

PB American Chemical Society

DT Journal

LA English

OS CASREACT 136:200160

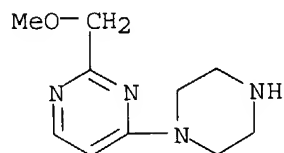
IT **300553-61-1P 400784-99-8P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and structure-activity relationships of oral antidiabetic, sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)

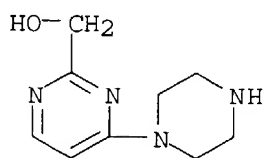
RN 300553-61-1 CAPLUS

CN Pyrimidine, 2-(methoxymethyl)-4-(1-piperazinyl)- (9CI) (CA INDEX NAME)



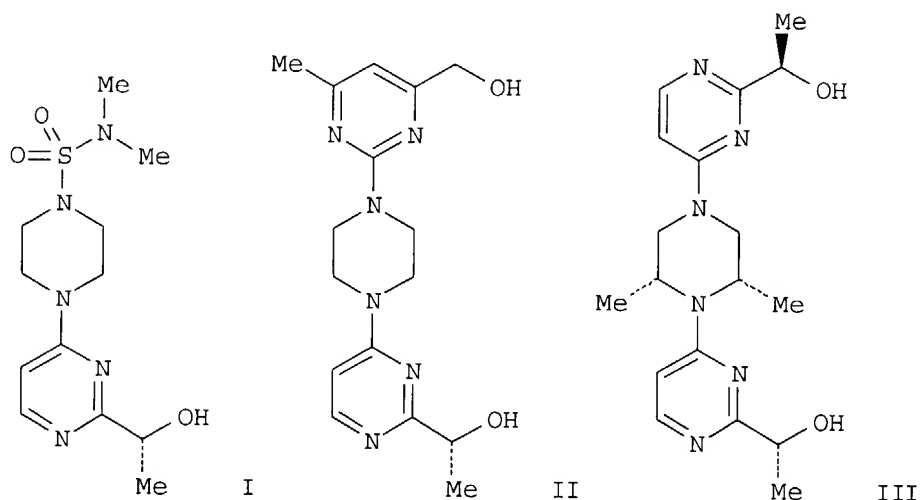
RN 400784-99-8 CAPLUS

CN 2-Pyrimidinemethanol, 4-(1-piperazinyl)-, dihydrochloride (9CI) (CA INDEX NAME)



● 2 HCl

GI



AB Optimization of a previously disclosed sorbitol dehydrogenase inhibitor (SDI, I) for potency and duration of action was achieved by replacing the metabolically labile N,N-dimethylsulfamoyl group with a variety of heterocycles. Specifically, this effort led to a series of novel, in vitro potent SDI's, e.g. the [[hydroxymethylpyrimidinyl]piperazinyl]pyrimidinylethanol II, with longer serum half-lives and acceptable in vivo activity in acutely diabetic rats. However, the desired in vivo potency in chronically diabetic rats, ED₉₀ ≤ 5 mg/kg/day, was achieved only through further modification of the piperazine linker. Several members of this family, including [[hydroxyethylpyrimidinyl]dimethylpiperazinyl]pyrimidinylethanol III, showed better than the targeted potency with ED₉₀ values of 1-2 mg/kg/day. III was further profiled and found to be a selective inhibitor of sorbitol dehydrogenase, with excellent pharmacodynamic/pharmacokinetic properties, demonstrating normalization of sciatic nerve fructose in a chronically diabetic rat model for .apprx.17 h, when administered orally at a single dose of 2 mg/kg/day.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:725471 CAPLUS

DN 133:281794
 TI Preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors
 IN Chu-moyer, Margaret Yuhua; Murry, Jerry Anthony; Mylari, Banavara
 Lakshman; Zembrowski, William James
 PA Pfizer Products Inc., USA
 SO PCT Int. Appl., 328 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000059510	A1	20001012	WO 2000-IB296	20000316
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	RW:			GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
				US 1999-127437PP	19990401
	AU 2000031845	A5	20001023	AU 2000-31845	20000316
	AU 768720	B2	20040108		
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				WO 2000-IB296 W	20000316
	NZ 514144	A	20010928	NZ 2000-514144	20000316
				US 1999-127437PP	19990401
	BR 2000009433	A	20020115	BR 2000-9433	20000316
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				WO 2000-IB296 W	20000316
	EP 1185275	A1	20020313	EP 2000-909565	20000316
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO	
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	JP 2002541109	T2	20021203	JP 2000-609073	20000316
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	EE 200100509	A	20021216	EE 2001-509	20000316
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	US 6414149	B1	20020702	US 2000-538039	20000329
				US 1999-127437PP	19990401
	NO 2001004642	A	20011128	NO 2001-4642	20010925
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	HR 2001000716	A1	20021231	HR 2001-716	20011001
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	ZA 2001008039	A	20030722	ZA 2001-8039	20011001
				US 1999-127437PP	19990401
	BG 106038	A	20020628	BG 2001-106038	20011023
				US 1999-127437PP	19990401
				WO 2000-IB296 W	20000316
	US 2003065179	A1	20030403	US 2002-87869	20020228
	US 6602875	B2	20030805		

US 6660740

B1 20031209

US 1999-127437PP 19990401
 US 2000-538039 A320000329
 US 2003-384424 20030310
 US 1999-127437PP 19990401
 US 2000-538039 A320000329
 US 2002-87869 A320020228

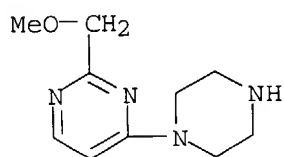
OS MARPAT 133:281794

IT **300553-61-1P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors)

RN 300553-61-1 CAPLUS

CN Pyrimidine, 2-(methoxymethyl)-4-(1-piperazinyl)- (9CI) (CA INDEX NAME)



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = CHO, COMe; COCH2Me, etc.; R2 = H, alkyl, alkoxy; R3 = II-IV, etc.; R23 = CONR25R26, SO2NR25R26 (wherein R25 = H, alkyl, arylalkylenyl; R26 = arylalkylenyl); R24 = H, alkyl, alkoxy, carbonyl, etc.; R27 = H, alkyl; R28, R29 = H, OH, halo, etc.], sorbitol dehydrogenase inhibitors (no data) which are useful in treating or preventing diabetic complications, particularly diabetic neuropathy, diabetic nephropathy, diabetic microangiopathy, diabetic macroangiopathy and diabetic cardiomyopathy, were prepared and formulated. E.g., a multi-step synthesis of the pyrimidine (R)-V, was given. This invention is also directed to pharmaceutical compns. comprising a combination of the compd. I with an aldose reductase inhibitor and to methods of treating or preventing diabetic complications therewith. This invention is also directed to pharmaceutical compns. comprising a combination of the compound I with an NHE-1 inhibitor and to methods of treating cardiomyopathy and other heart-related problems therewith.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 15 fbib hitstr abs totalt
 'TOTALT' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

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ABS ----- GI and AB
 ALL ----- BIB, AB, IND, RE
 APPS ----- AI, PRAI
 BIB ----- AN, plus Bibliographic Data and PI table (default)
 CAN ----- List of CA abstract numbers without answer numbers

CBIB ----- AN, plus Compressed Bibliographic Data
 DALL ----- ALL, delimited (end of each field identified)
 DMAX ----- MAX, delimited for post-processing
 FAM ----- AN, PI and PRAI in table, plus Patent Family data
 FBIB ----- AN, BIB, plus Patent FAM
 IND ----- Indexing data
 IPC ----- International Patent Classifications
 MAX ----- ALL, plus Patent FAM, RE
 PATS ----- PI, SO
 SAM ----- CC, SX, TI, ST, IT
 SCAN ----- CC, SX, TI, ST, IT (random display, no answer numbers;
 SCAN must be entered on the same line as the DISPLAY,
 e.g., D SCAN or DISPLAY SCAN)
 STD ----- BIB, IPC, and NCL

 IABS ----- ABS, indented with text labels
 IALL ----- ALL, indented with text labels
 IBIB ----- BIB, indented with text labels
 IMAX ----- MAX, indented with text labels
 ISTD ----- STD, indented with text labels

 OBIB ----- AN, plus Bibliographic Data (original)
 OIBIB ----- OBIB, indented with text labels

 SBIB ----- BIB, no citations
 SIBIB ----- IBIB, no citations

 HIT ----- Fields containing hit terms
 HITIND ----- IC, ICA, ICI, NCL, CC and index field (ST and IT)
 containing hit terms
 HITRN ----- HIT RN and its text modification
 HITSTR ----- HIT RN, its text modification, its CA index name, and
 its structure diagram
 HITSEQ ----- HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 FHITSTR ----- First HIT RN, its text modification, its CA index name, and
 its structure diagram
 FHITSEQ ----- First HIT RN, its text modification, its CA index name, its
 structure diagram, plus NTE and SEQ fields
 KWIC ----- Hit term plus 20 words on either side
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 ENTER DISPLAY FORMAT (BIB):end

=> d his

(FILE 'HOME' ENTERED AT 11:11:22 ON 24 MAR 2004)

FILE 'REGISTRY' ENTERED AT 11:11:38 ON 24 MAR 2004

L1 STRUCTURE UPLOADED
L2 2 S L1 SSS FULL

FILE 'MARPAT' ENTERED AT 11:12:13 ON 24 MAR 2004

L3 8 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 11:12:32 ON 24 MAR 2004

L4 2 S L2
L5 8 S L3

=> d 15 fbib hitstr abs total

L5 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:454066 CAPLUS

DN 139:36531

TI Preparation of morpholinopyrimidine derivatives as interleukin-12 inhibitors

IN Ono, Mitsunori; Sun, Lijun; Przewloka, Teresa; Zhang, Shijie; Kostik, Elena; Ying, Weiwen; Wada, Yumiko; Koya, Keizo; Wu, Yaming; Zhou, Dan; Tatsuta, Noriaki

PA Synta Pharmaceuticals Corporation, USA

SO PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003047516	A2	20030612	WO 2002-US38161	20021127
	WO 2003047516	A3	20030731		
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				US 2001-742	A120011130
				US 2002-192347	A120020710
	US 2003139403	A1	20030724	US 2001-742	20011130
	US 6693097	B2	20040217		
	US 2003114446	A1	20030619	US 2002-192347	20020710
	US 6660733	B2	20031209		
				US 2001-742	A220011130

PATENT FAMILY INFORMATION:

FAN 2003:473261

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PI	US 2003114446	A1	20030619	US 2002-192347	20020710
	US 6660733	B2	20031209		
	US 2003139403	A1	20030724	US 2001-742	A220011130
	US 6693097	B2	20040217	US 2001-742	20011130

WO 2003047516 A2 20030612 WO 2002-US38161 20021127
 WO 2003047516 A3 20030731

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
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 PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

US 2004048873 A1 20040311

US 2004053937 A1 20040318

US 2001-742 A120011130
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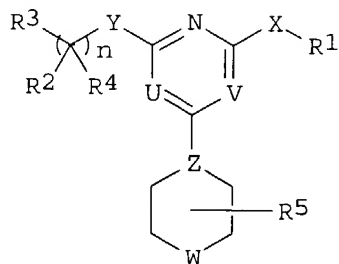
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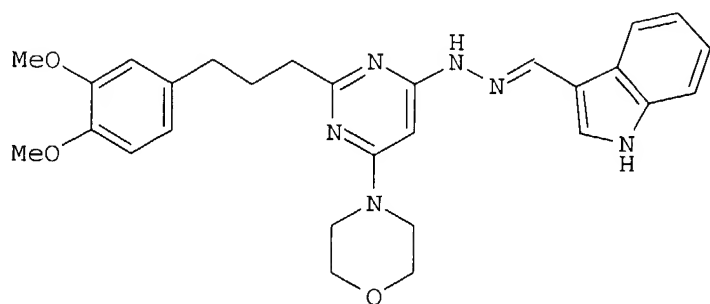
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US 6693097	B2	20040217
US 2004048873	A1	20040311

US 2003-656671 20030905
 US 2001-742 A120011130

OS MARPAT 139:36531
 GI



I



II

AB The title compds. I [wherein R1 = N=CRaRb, aryl, or heteroaryl; R2 and R4 = independently Rc, halo, NO2, CN, isothionitro, SRc, or ORc; or R2 and R4 together form =O; R3 = Rc, alkenyl, alkynyl, ORc, OCORc, SO2Rc, SORc, SO2NRcRd, SRc, NRcRd, NRcCORd, NRcCO2Rd, NRcCONRcRd, NRcSO2Rd, CORc, CO2Rc, or CONRcRd; R5 = H or alkyl; n = 0-6; X = O, S, SO, SO2, or NRc; Y = a bond, CH2, CO, C=NRc, C=NORc, C=NSRc, O, S, SO, SO2, or NRc; Z = N or CH; one of U and V is N, the other is CRc; W = O, S, SO, SO2, NRc, or NCORc; Ra and Rb = independently H, alkyl, aryl, or heteroaryl; Rc and Rd = independently H, alkyl, aryl, heteroaryl, cyclyl, heterocyclyl, or alkylcarbonyl] are prepared as interleukin-12 (IL-12) inhibitors. For example, the pyrimidine II was prepared in a multi-step synthesis in moderate yield. I showed IC50 of <1 nM against human PBMC or THP-1 cells. I are useful for treating IL-12 over-production related diseases (e.g., rheumatoid arthritis, sepsis, Crohn's disease, multiple sclerosis, psoriasis, or insulin-dependent diabetes mellitus) (no data).

L5 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:220561 CAPLUS

DN 136:263168

TI Preparation of substituted heterocyclic aryl-alkyl-aryl compounds as thrombin inhibitors

IN Isaacs, Richard C.; Williams, Peter D.; Lyle, Terry A.; Staas, Donnette D.; Savage, Kelly L.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 91 pp.

CODEN: PIXXD2

DT Patent

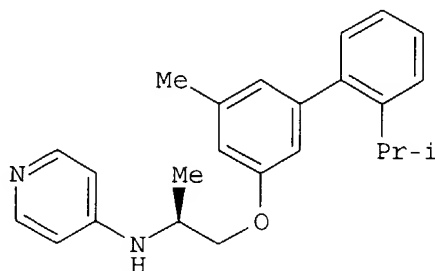
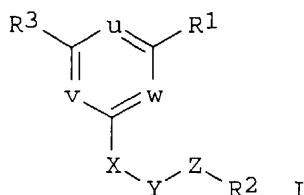
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002022584	A1	20020321	WO 2001-US28791	20010911
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001094557	A5	20020326	US 2000-231656PP	20000911
				AU 2001-94557	20010911
				US 2000-231656PP	20000911
				WO 2001-US28791W	20010911

OS MARPAT 136:263168

GI



AB Title compds. I [u, v, w = CH, N; X = O, SOO-2, NH, alkenyl, C:O, C:ONH, C:OO, alkyl, CH2NH, CH2O, CF2; Y = (CH2)0-1(CR4R5)(CH2)0-1; Z = O, SO-2, C:O, amino, CF2, bond; R1 = H, alkyl(CN), C:O, (CH2)0-1-carboxy, CF3, alkoxy, halo, SOO-2, amino; R2 = (un)substituted ring system, 5-6-membered heterocycle; R3 = Ph, (un)substituted ring system, 5-6-membered heterocycle; R4-5 = H, alkyl; R6, R8 = halo, alkylamino, heterocycle] were prepared. Examples include data for over 20 compds., 3 solid oral dosage formulations and an in-vitro assay for protease determination for example compds.

For instance, 2'-isopropyl-5-methylbiphenyl-3-ol (prepared in 3 steps from 2-isopropylphenyl iodide) was reacted with (S)-2-(pyridin-4-ylamino)propan-1-ol to give II isolated as the trifluoroacetate. Example compds. exhibited inhibitory activity against human thrombin, $K_i < 24$ nM. I are useful in the treatment of blood coagulation and cardiovascular disorders.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:144736 CAPLUS
DN **132:194392**
TI Preparation of heterocyclic carboxamide derivatives as antiviral agents
IN Furuta, Yousuke; Egawa, Hiroyuki
PA Toyama Chemical Co., Ltd., Japan
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

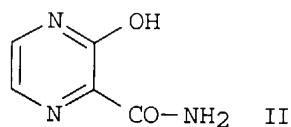
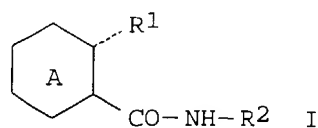
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010569	A1	20000302	WO 1999-JP4429	19990818

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,

MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2339272	AA	20000302	JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 CA 1999-2339272 19990818 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 AU 1999-53004 19990818
AU 9953004	A1	20000314	JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 EP 1999-938504 19990818
AU 756635	B2	20030116	
EP 1112743	A1	20010704	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
BR 9913097	A	20010925	JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 BR 1999-13097 19990818 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 NZ 1999-509748 19990818 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 JP 2000-565890 19990818 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 RU 2001-104536 19990818 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 ZA 2001-1101 20010208 JP 1998-250441 A 19980820 NO 2001-836 20010219 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818 US 2001-788992 20010220 JP 1998-250441 A 19980820 JP 1999-145922 A 19990526 WO 1999-JP4429 W 19990818
NZ 509748	A	20030131	
JP 3453362	B2	20031006	
RU 2224520	C2	20040227	
ZA 2001001101	A	20011211	
NO 2001000836	A	20010418	
US 2002013316	A1	20020131	

OS MARPAT 132:194392
 GI



AB The title compds. I [ring A is an optionally substituted pyrazine, pyrimidine, pyridazine or triazine ring; R1 is O or OH; R2 is hydrogen, acyl, or optionally substituted carbamoylalkyl or carboxyalkyl; and the dotted line represents a single or double bond] are prepared I are useful as preventives and therapeutic agents for infections with viruses, particularly influenza virus. The title compound II at 1 µg/mL showed 91.9% inhibition of influenza virus.

RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1999:780344 CAPLUS
DN 132:3362
TI Preparation of cytokine-inhibiting pyrimidinylpyrazoles
IN Adams, Jerry Leroy; Gallagher, Timothy Francis; Garigipati, Ravi Shanker; Thompson, Susan Mary
PA SmithKline Beecham Corporation, USA
SO U.S., 15 pp., Cont.-in-part of U.S. 5,559,137.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5998425	A	19991207	US 1996-454170	19961115
				US 1994-242906 A219940516	
				WO 1995-US6287 W	19950516
	US 5559137	A	19960924	US 1994-242906	19940516
	WO 9531451	A1	19951123	WO 1995-US6287	19950516
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				US 1994-242906 A	19940516
	US 6306883	B1	20011023	US 1999-456019	19991203
				US 1994-242906 A219940516	
				WO 1995-US6287 W	19950516
				US 1996-454170 A319961115	

PATENT FAMILY INFORMATION:

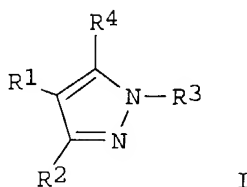
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FAN	1996:161154				
PI	WO 9531451	A1	19951123	WO 1995-US6287	19950516
	W: JP, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
				US 1994-242906 A	19940516
	US 5559137	A	19960924	US 1994-242906	19940516
	JP 10500413	T2	19980113	JP 1995-529891	19950516
				US 1994-242906 A	19940516
				WO 1995-US6287 W	19950516
	EP 871622	A1	19981021	EP 1995-921292	19950516
	R: BE, CH, DE, FR, GB, IT, LI, NL				
				US 1994-242906 A	19940516
				WO 1995-US6287 W	19950516
	US 5998425	A	19991207	US 1996-454170	19961115
				US 1994-242906 A219940516	
				WO 1995-US6287 W	19950516
	US 6306883	B1	20011023	US 1999-456019	19991203
				US 1994-242906 A219940516	

WO 1995-US6287 W 19950516

US 1996-454170 A319961115

OS MARPAT 132:3362

GI



AB The title compds. [I; one of R1 and R2 is (un)substituted 4-pyrimidinyl and the other is (un)substituted Ph or naphthyl; R3 = Q(Ym)t; Q = aryl; Y = H, alkyl, haloalkyl, etc.; m = 0-2; t = 1-3; R4 = H, alkyl, haloalkyl, alkenyl, alkynyl, cycloalkyl, etc.] [e.g., 4-(2-amino-4-pyrimidinyl)-3-(4-fluorophenyl)-1-phenylpyrazole; m.p. 170-171°], which are cytokine inhibitors (no data) and useful for the treatment of cytokine-mediated diseases (no data), are prepared

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:239219 CAPLUS

DN **128:282847**

TI Preparation of 1,4-disubstituted piperazines for the treatment of painful, hyperalgesic and/or inflammatory conditions

IN Hohlweg, Rolf; Madsen, Peter; Jorgensen, Tine Krogh; Andersen, Knud Erik; Watson, Brett; Polivka, Zdenek; Konigova, Otylie; Kovandova, Martina; Silhankova, Alexandra; Valenta, Vladimir

PA Novo Nordisk A/S, Den.

SO PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9815548	A1	19980416	WO 1997-DK422	19971002
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9743772	A1	19980505	DK 1996-1090	A 19961004
AU 740662	B2	20011108	AU 1997-43772	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
EP 934312	A1	19990811	EP 1997-941884	19971002
EP 934312	B1	20030319		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
SI, LT, LV, FI, RO

BR 9712196	A	19990831	DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
			BR 1997-12196	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
			CN 1997-199184	19971002
CN 1234799	A	19991110		
CN 1088459	B	20020731		
JP 2001502307	T2	20010220	DK 1996-1090	A 19961004
			JP 1998-517093	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
RU 2188197	C2	20020827	RU 1999-109024	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
AT 234831	E	20030415	AT 1997-941884	19971002
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
ES 2194217	T3	20031116	ES 1997-941884	19971002
			DK 1996-1090	A 19961004
ZA 9708864	A	19980406	ZA 1997-8864	19971003
			DK 1996-1090	A 19961004
US 5916889	A	19990629	US 1997-943726	19971003
			DK 1996-1090	A 19961004
US 6004961	A	19991221	US 1999-271785	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
US 6040302	A	20000321	US 1999-271565	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
US 6133268	A	20001017	US 1999-271564	19990318
			DK 1996-1090	A 19961004
			US 1997-943726	A319971003
NO 9901565	A	19990604	NO 1999-1565	19990330
			DK 1996-1090	A 19961004
			WO 1997-DK422	W 19971002
KR 2000048899	A	20000725	KR 1999-702928	19990403
			DK 1996-1090	A 19961004

OS MARPAT 128:282847
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1, R2 = H, halo, CF3, etc.; X = o-phenylene, O, S, etc.; Y = N-CH2-, CH-CH2-, C:CH-, CH-O- (only the first atom participates in the ring system); r = 1-3; Z = II-V (M1, M2 = C, N; R5 = H, Cl-6 alkyl, PhCH2, Ph; R3 = H, halo, CF3, NO2, CN; R4 = H, halo, CF3, etc.)] and their salts, useful for the clin. treatment of painful, hyperalgesic and/or inflammatory conditions in which C-fibers play a pathophysiol. role such as e.g. neurogenic pain, inflammation, migraine, neuropathy, itching and rheumatoid arthritis, as well as for the treatment of indications caused by or related to the secretion and circulation of insulin antagonizing peptides, e.g. non-insulin-dependent diabetes mellitus (NIDDM) and ageing-associated obesity, were prepared and formulated. Thus, reaction of

6-(1-piperazinyl)-2-pyridinecarboxylic acid Et ester (preparation described) with (10,11-dihydro-5H-dibenzo[b,f]acepin-5-yl)-1-Pr methanesulfonate in the presence of K₂CO₃ in Me₂CO followed by hydrolysis of the resulting ester with NaOH in H₂O/EtOH afforded the title compound VI.HCl which showed 61% inhibition of histamine induced pain response at 1.0 mg/kg.

L5 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1998:180867 CAPLUS
 DN **128:230376**
 TI Benzamidine derivatives substituted by cyclic amino acid or cyclic hydroxy acid derivatives, and their use as anticoagulants
 IN Kochanny, Monica; Morrissey, Michael M.; Ng, Howard P.
 PA Schering A.-G., Germany
 SO PCT Int. Appl., 79 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811094	A1	19980319	WO 1997-EP4961	19970911
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	RW:			GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG	
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
	US 6008234	A	19991228	US 1997-920319	19970827
				US 1996-713066 A2	19960912
	AU 9743843	A1	19980402	AU 1997-43843	19970911
	AU 723999	B2	20000907		
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				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	EP 929547	A1	19990721	EP 1997-942015	19970911
	EP 929547	B1	20021127		
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				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	JP 2001500147	T2	20010109	JP 1998-513257	19970911
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
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				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
	NO 9901206	A	19990511	NO 1999-1206	19990311
				US 1996-713066 A	19960912
				US 1997-920319 A	19970827
				WO 1997-EP4961 W	19970911
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US 1996-713066 A 19960912
 US 1997-920319 A 19970827
 WO 1997-EP4961 W 19970911

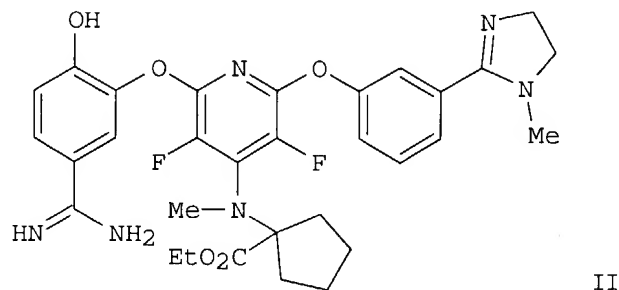
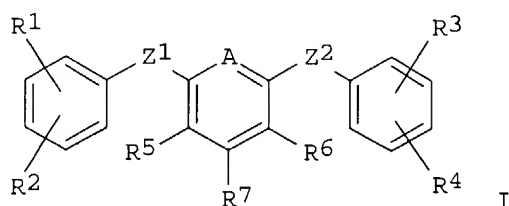
PATENT FAMILY INFORMATION:

FAN 1999:818934

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6008234	A	19991228	US 1997-920319	19970827
WO 9811094	A1	19980319	US 1996-713066 A2	19960912
			WO 1997-EP4961	19970911
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9743843	A1	19980402	US 1996-713066 A	19960912
AU 723999	B2	20000907	US 1997-920319 A	19970827
			AU 1997-43843	19970911
EP 929547	A1	19990721	US 1996-713066 A	19960912
EP 929547	B1	20021127	US 1997-920319 A	19970827
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			WO 1997-EP4961 W	19970911
			EP 1997-942015	19970911
CN 1234798	A	19991110	US 1996-713066 A	19960912
			US 1997-920319 A	19970827
			WO 1997-EP4961 W	19970911
JP 2001500147	T2	20010109	CN 1997-198664	19970911
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
			JP 1998-513257	19970911
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
AT 228513	E	20021215	WO 1997-EP4961 W	19970911
			AT 1997-942015	19970911
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
PT 929547	T	20030331	WO 1997-EP4961 W	19970911
			PT 1997-97942015	19970911
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
ES 2188979	T3	20030701	ES 1997-942015	19970911
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
KR 2000036017	A	20000626	KR 1999-701989	19990310
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
NO 9901206	A	19990511	NO 1999-1206	19990311
			US 1996-713066 A	19960912
			US 1997-920319 A	19970827
MX 9902396	A	20000331	WO 1997-EP4961 W	19970911
			MX 1999-2396	19990311
			US 1996-713066 A	19960912

US 6177473	B1	20010123	US 1997-920319 A 19970827
			WO 1997-EP4961 W 19970911
			US 1999-439065 19991112
			US 1996-713066 B219960912
US 6232325	B1	20010515	US 1997-920319 A319970827
			US 1999-438354 19991112
			US 1996-713066 B219960912
US 6265404	B1	20010724	US 1997-920319 A319970827
			US 1999-438270 19991112
			US 1996-713066 B219960912
CN 1338454	A	20020306	US 1997-920319 A319970827
			CN 2001-121736 20010703
			US 1996-713066 A 19960912
			US 1997-920319 A 19970827

OS MARPAT 128:230376
GI



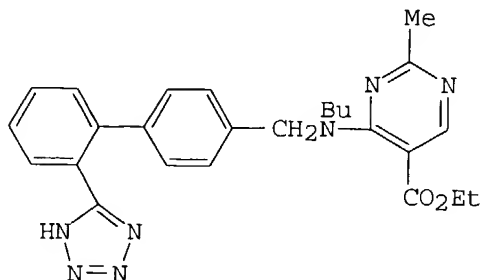
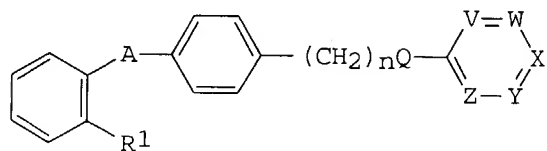
AB The invention is directed to benzamidine derivs. substituted by cyclic amino acid and cyclic hydroxy acid derivs., which are represented by seven general formulas, e.g., I [A = CR₈ or N; Z₁, Z₂ = O, NR₉, S, S(O), S(O)₂, or OCH₂; R₁, R₄ = H, halo, alkyl, NO₂, OR₉, CO₂R₉, NR₉R₁₀ or derivs.; R₂ = C(:NH)NH₂, C(:NH)NHOR₉, C(:NH)NHCO₂R₁₂, C(:NH)NHCOR₉, etc.; R₃ = H, alkyl, halo, haloalkyl, NO₂, ureido, guanidino, OR₉, C(:NH)NH₂ or derivs., etc.; R₅, R₆ = H, halo, alkyl, haloalkyl, NR₉R₁₀, CO₂R₉, etc.; R₇ = NR₉(CR₉R₁₀)O-4R₁₃, O(CR₉R₁₀)O-4R₁₃, or NR₁₄R₁₅; R₈ = H, alkyl, halo; R₉, R₁₀ = H, alkyl, (un)substituted aryl or aralkyl; R₁₂ = alkyl, (un)substituted aryl or aralkyl; R₁₃ = (un)substituted carbocycle; R₁₃, NR₁₄R₁₅ = (un)substituted heterocycle]. The compds. are useful as anticoagulants. This invention is also directed to pharmaceutical compns. containing the compds., and their use to treat thrombotic disease states. For example, pentafluoropyridine underwent a sequence of: (1) amination in the 4-position by Et 1-amino-1-cyclopentanecarboxylate-HCl (82%); (2) N-methylation of the amino group (65%); (3) etherification in the

2-position with 2-(benzyloxy)-5-cyanophenol (60%); (4) etherification in the 6-position with 3-(1-methylimidazolin-2-yl)phenol; and (5) Pinner reaction of the nitrile with concomitant debenzoylation, to give title compound II (isolated as the CF₃CO₂H salt).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1992:426587 CAPLUS
DN **117:26587**
TI Preparation of [(tetrazolylbiphenyl)methylaminol]pyrimidinecarboxylates and related compounds for treatment of psoriasis
IN Boger, Robert S.
PA Abbott Laboratories, USA
SO U.S., 7 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5104877	A	19920414	US 1991-661563	19910225
	WO 9214468	A1	19920903	WO 1992-US656	19920128
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
					US 1991-661563 19910225
OS	MARPAT 117:26587				
GI					



AB Title compds. [I; A = bond, O, CO; Q = NR₄, O, S; R₄ = H, (alkoxy)alkyl; R₁ = tetrazolyl, CO₂R₅, NHSO₂R₆; R₅ = H, protecting group; R₆ = (halo)alkyl; V, W, X, Y, Z = N, CH, CR₂, CR₃; R₂ = alkyl(thio), alkoxyalkyl, alkylthioalkyl, arylalkyl, amino; R₃ = cyano, NO₂, NHSO₂R₉, CO₂R₁₀, etc.; R₉ = (halo)alkyl; R₁₀ = H, protecting group; n = 0, 1] were prepared as angiotensin II antagonists for treatment of psoriasis (no data).

Thus, N-triphenylmethyl-5-(4'-butylaminomethylbiphenyl-2-yl)tetrazole (preparation given) was condensed with Et 2-methyl-4-chloropyrimidine-5-carboxylate in THF containing Et₃N and the product was treated with concentration HCl/EtOH to give title compound II.

L5 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:194353 CAPLUS

DN **116:194353**

TI Substituted pyrimidine derivatives, their preparation and their use as reagents

IN Geisen, Karl; Utz, Roland; Nimmesgern, Hildegard; Lang, Hans Jochen

PA Hoechst A.-G., Germany

SO Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

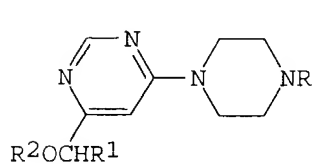
LA German

FAN.CNT 1

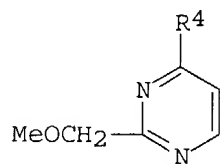
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PI	EP 470616	A2	19920212	EP 1991-113334	19910808
	EP 470616	A3	19920325		
	EP 470616	B1	19970219		
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	DE 4025387	A1	19920213	DE 1990-4025387A	19900810
	US 5215990	A	19930601	DE 1990-4025387	19900810
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				AT 1991-113334	19910808
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				DE 1990-4025387A	19900810
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	JP 3094535	B2	20001003		
				DE 1990-4025387A	19900810

OS MARPAT 116:194353

GI



I



II

AB Pyrimidinylpiperazines I (R = CHO, COR₃, SO₂R₃; R₁ = H, Me; R₂ = H, alkyl, CH₂Ph, Ac, Bz; R₃ = alkyl, cycloalkyl, Ph, substituted Ph, amino, pyridyl) were prepared for use as inducers of elevated intracellular sorbitol levels in tests for aldose reductase inhibitors (no data). Thus, AcOEt was formylated with HCO₂Et and the resulting HCOCH₂CO₂Et was converted to its Na salt and treated with MeOCH₂C(:NH)NH₂·HCl to give pyrimidinol II (R₄ = OH) which was chlorinated with POCl₃ and treated with dimethylsulfamoylpiperazine to give I (R = SO₂NMe₂, R₁ = H, R₂ = Me). The latter compound was demethylated with BBr₃, giving I (R = SO₂NMe₂, R₁, R₂ = H). At 25 mg/kg orally in rats the latter compound caused greatly increased intracellular sorbitol concns. which were inhibited by the aldose reductase inhibitor spiro-2,7-difluoro-9H-fluorene-9,4-imidazolidine-2,5-dione.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

50.49

315.54

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

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-6.93

STN INTERNATIONAL LOGOFF AT 11:14:53 ON 24 MAR 2004



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NEWS 5 SEP 29 DISSABS now available on STN
NEWS 6 OCT 10 PCTFULL: Two new display fields added
NEWS 7 OCT 21 BIOSIS file reloaded and enhanced
NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
NEWS 11 DEC 08 IMS file names changed
NEWS 12 DEC 09 Experimental property data collected by CAS now available
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NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS 14 DEC 17 DGENE: Two new display fields added
NEWS 15 DEC 18 BIOTECHNO no longer updated
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer
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NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS
databases
NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19 DEC 22 ABI-INFORM now available on STN
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated
and searchable
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in
CA/CAPLUS
NEWS 22 FEB 05 German (DE) application and patent publication number format
changes
NEWS 23 MAR 03 MEDLINE and LMEADLINE reloaded
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 25 MAR 03 FRANCEPAT now available on STN

NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0
DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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L1 STRUCTURE UPLOADED

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L1 HAS NO ANSWERS
L1 STR
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

Structure attributes must be viewed using STN Express query preparation.

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FULL SCREEN SEARCH COMPLETED - 603 TO ITERATE

100.0% PROCESSED 603 ITERATIONS
SEARCH TIME: 00.00.01

44 ANSWERS

L2 44 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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156.05

FILE 'CAPLUS' ENTERED AT 11:35:05 ON 24 MAR 2004

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FILE LAST UPDATED: 23 Mar 2004 (20040323/ED)

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L3 5 L2

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L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:428741 CAPLUS

DN 137:10996

TI Combination of GABA agonists and sorbitol dehydrogenase inhibitors

IN Mylari, Banavara Lakshman

PA Pfizer Products Inc., USA

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002043762	A2	20020606	WO 2001-IB2213	20011119
	WO 2002043762	A3	20030313		

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BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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			WO 2001-IB2213 W 20011119
EP 1337271	A2	20030827	EP 2001-983739 20011119
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			WO 2001-IB2213 W 20011119
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			US 2000-250069PP 20001130
			WO 2001-IB2213 W 20011119
EE 200300248	A	20031015	EE 2003-248 20011119
			US 2000-250069PP 20001130
			WO 2001-IB2213 W 20011119
US 2002091128	A1	20020711	US 2001-997038 20011129
US 6544998	B2	20030408	
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OS MARPAT 137:10996

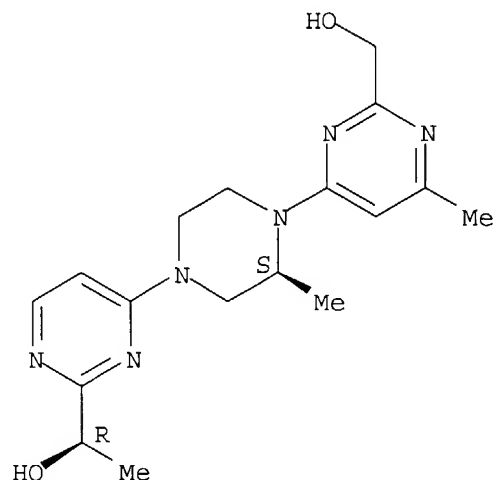
IT **300548-92-9 300549-05-7 300549-16-0**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination of GABA agonists and sorbitol dehydrogenase inhibitors)

RN 300548-92-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX NAME)

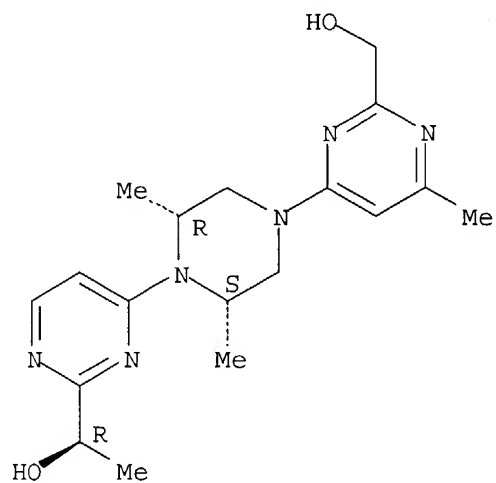
Absolute stereochemistry. Rotation (+).



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CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX NAME)

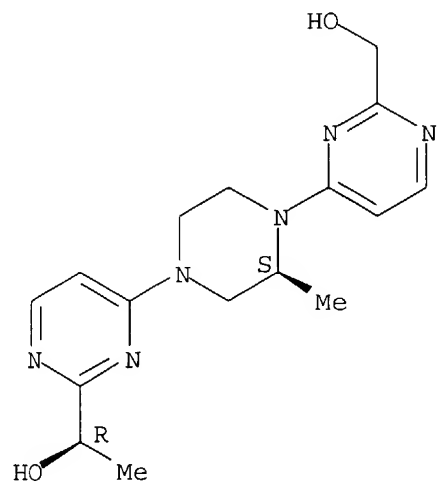
Absolute stereochemistry. Rotation (+).



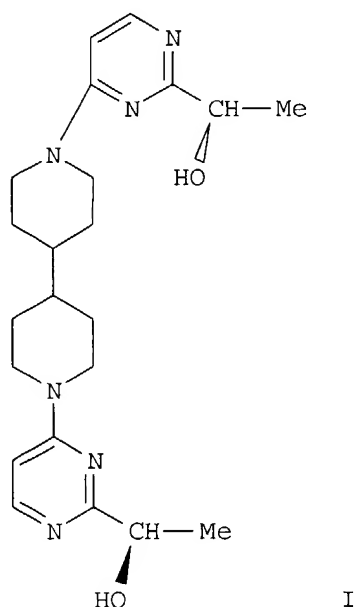
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CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



GI



AB This invention relates to pharmaceutical compns. comprising combinations of a GABA agonist, a prodrug thereof or a pharmaceutically acceptable salt of said GABA agonist or said prodrug and a SDI, a prodrug thereof or a pharmaceutically acceptable salt of said SDI or said prodrug, kits containing such combinations and methods of using such combinations to treat mammals, including humans, suffering from diabetic complications such as diabetic neuropathy, diabetic nephropathy, diabetic cardiomyopathy, diabetic retinopathy, diabetic microangiopathy, diabetic macroangiopathy, cataracts or foot ulcers. An example GABA agonist is gabapentin and example SDI is I.

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:314757 CAPLUS

DN 136:345787

TI Combination of statins and sorbitol dehydrogenase inhibitors

IN Mylari, Banavara Lakshman

PA Pfizer Products Inc., USA

SO PCT Int. Appl., 84 pp.

CODEN: PIXXD2

DT Patent

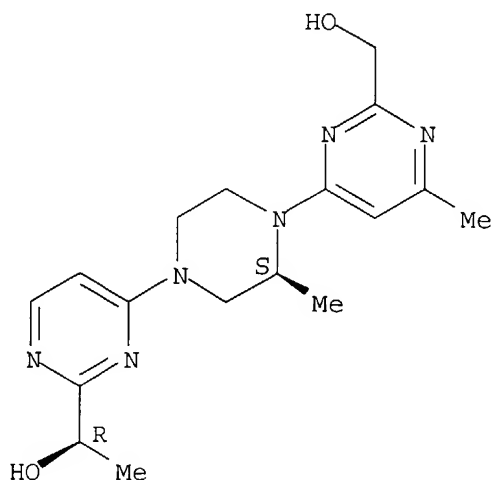
LA English

FAN.CNT 1

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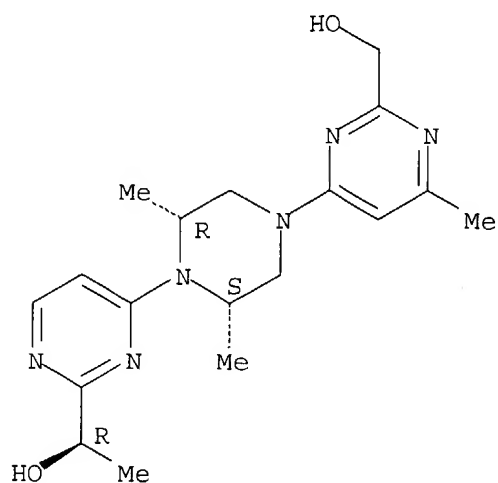
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 WO 2001-IB1506 W 20010820
 EP 2001-954305 20010820
 EP 1326591 A2 20030716
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 US 2000-241339PP 20001018
 WO 2001-IB1506 W 20010820
 US 2003186994 A1 20031002
 US 2001-974414 20011009
 US 2000-241339PP 20001018
 IT **300548-92-9 300549-05-7 300549-16-0**
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination of statins and sorbitol dehydrogenase inhibitors)
 RN 300548-92-9 CAPLUS
 CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-
 3-methyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX
 NAME)

Absolute stereochemistry. Rotation (+).



RN 300549-05-7 CAPLUS
 CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-
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 (9CI) (CA INDEX NAME)

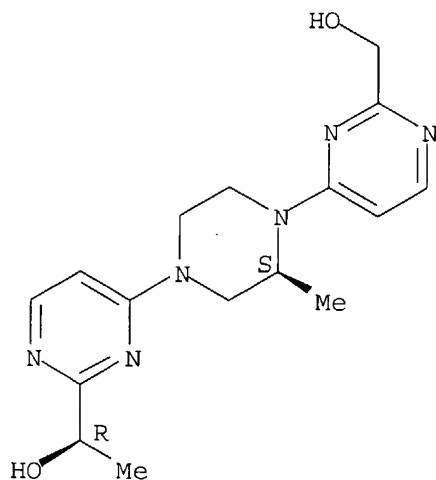
Absolute stereochemistry. Rotation (+).



RN 300549-16-0 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



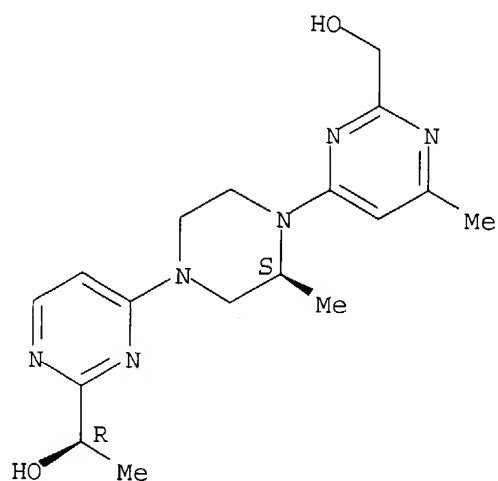
AB This invention relates to pharmaceutical compns. comprising combinations of a statin or it salt, a prodrug or the prodrug and a sorbitol dehydrogenase inhibitor, a prodrug or a salt of the sorbitol dehydrogenase inhibitor or the prodrug. Kits containing such combinations and methods of using such combinations to treat mammals, including humans, suffering from arteriosclerosis and/or diabetic complications such as diabetic neuropathy, diabetic nephropathy, diabetic cardiomyopathy, diabetic retinopathy, diabetic microangiopathy, diabetic macroangiopathy, cataracts or foot ulcers are disclosed. The statins are administered in the following dosage amts.: e.g., atorvastatin 10-80 mg; simvastatin 10-40 mg;.

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:936092 CAPLUS

DN 136:53752
 TI Synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors
 IN Mylari, Banavara L.
 PA USA
 SO U.S. Pat. Appl. Publ., 41 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001056095	A1	20011227	US 2001-782798	20010213
	US 6570013	B2	20030527		
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	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				
	(combination pharmaceutical; synthesis and use of mono-, di- and triethanolamine salts of zopolrestat alone and in combination with (e.g.) NHE-1 inhibitors)				
RN	300548-92-9 CAPLUS				
CN	2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R)- (9CI) (CA INDEX NAME)				

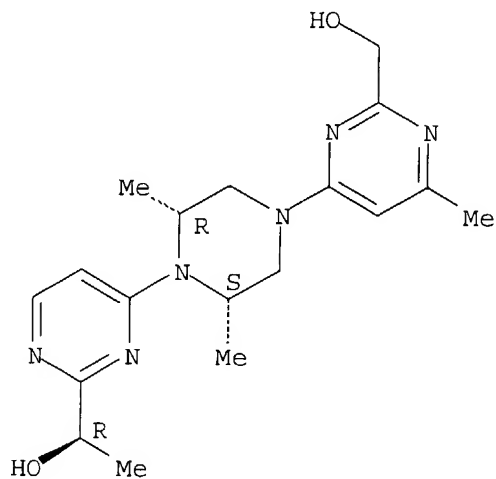
Absolute stereochemistry. Rotation (+).



RN 300549-05-7 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

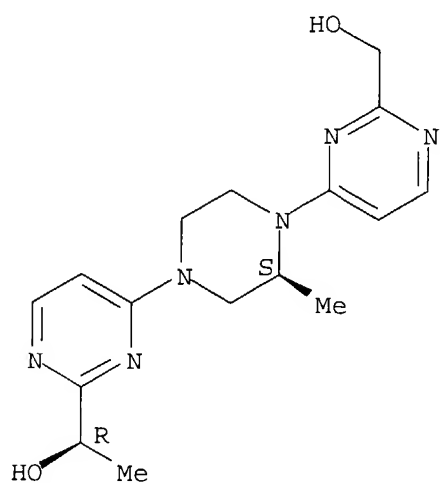
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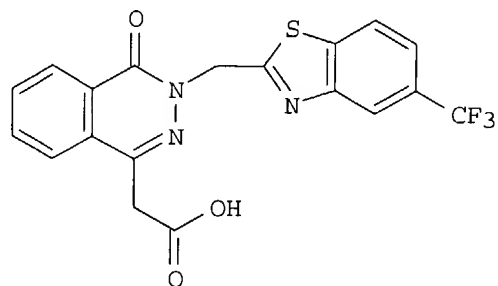
RN 300549-16-0 CAPLUS

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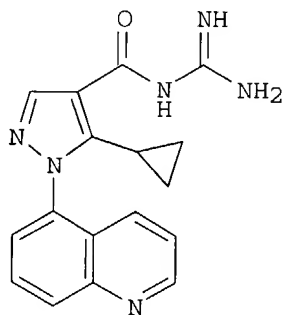
Absolute stereochemistry. Rotation (+).



GI



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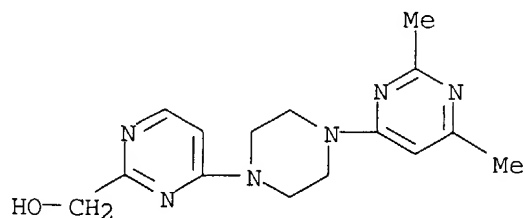


II

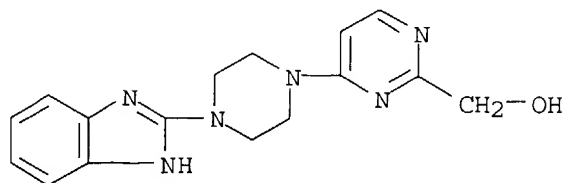
AB Mono-, di- and triethanolamine salts of [4-Oxo-(5-trifluoromethylbenzothiazol-2-ylmethyl)-3,4-dihydrophthalazin-1-yl]acetic acid (zopolrestat; I) were prepared. E.g., a solution of I in acetone was added to ethanolamine (10 mol equiv, room temperature, 1 h) which afforded, after purification, the ethanolamine salt in 95% yield, m.p. 119 - 121°C. Ethanolamine salts of I are used alone or with NHE-1 inhibitors (e.g. II), selective serotonin reuptake inhibitors (SSRIs, e.g. fluoxetine), glycogen phosphorylase inhibitors (GPIs), sorbitol dehydrogenase inhibitors (SDIs)

and antihypertensive agents for treating diabetic complications.

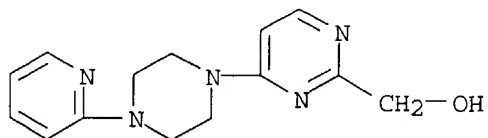
L3 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 2001:916027 CAPLUS
 DN 136:200160
 TI Orally-Effective, Long-Acting Sorbitol Dehydrogenase Inhibitors:
 Synthesis, Structure-Activity Relationships, and in Vivo Evaluations of
 Novel Heterocycle-Substituted Piperazino-Pyrimidines
 AU Chu-Moyer, Margaret Y.; Ballinger, William E.; Beebe, David A.; Berger,
 Richard; Coutcher, James B.; Day, Wesley W.; Li, Jiancheng; Mylari,
 Banavara L.; Oates, Peter J.; Weekly, R. Matthew
 CS Departments of Cardiovascular and Metabolic Disease and Drug Metabolism
 Development, Pfizer Global Research and Development, Groton Laboratories,
 Groton, CT, 06340, USA
 SO Journal of Medicinal Chemistry (2002), 45(2), 511-528
 CODEN: JMCMAR; ISSN: 0022-2623
 PB American Chemical Society
 DT Journal
 LA English
 OS CASREACT 136:200160
 IT 400785-00-4P 400785-12-8P 400785-13-9P
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 400785-24-2P 400785-25-3P 400785-26-4P
 400785-27-5P 400785-28-6P 400785-29-7P
 400785-30-0P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL
 (Biological study); PREP (Preparation)
 (preparation and structure-activity relationships of oral antidiabetic,
 sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)
 RN 400785-00-4 CAPLUS
 CN 2-Pyrimidinemethanol, 4-[4-(2,6-dimethyl-4-pyrimidinyl)-1-piperazinyl]-
 (9CI) (CA INDEX NAME)



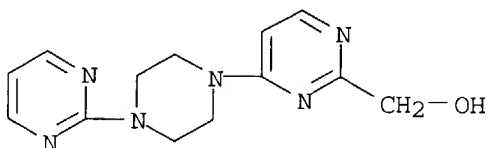
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 CN 2-Pyrimidinemethanol, 4-[4-(1H-benzimidazol-2-yl)-1-piperazinyl]- (9CI)
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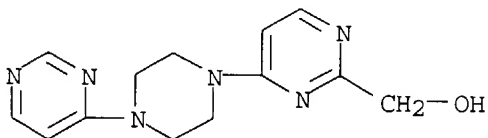
RN 400785-13-9 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(2-pyridinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



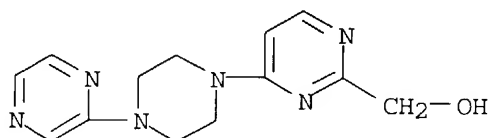
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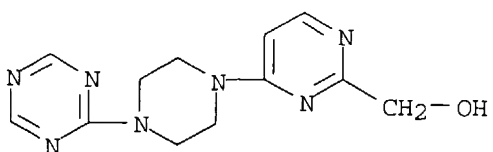
RN 400785-15-1 CAPLUS
CN 2-Pyrimidinemethanol, 4-[4-(4-pyrimidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 400785-16-2 CAPLUS
CN 2-Pyrimidinemethanol, 4-(4-pyrazinyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

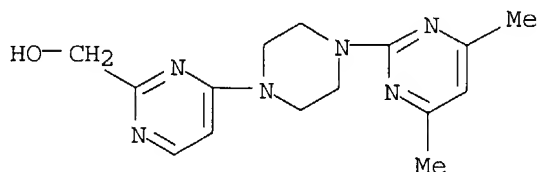


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CN 2-Pyrimidinemethanol, 4-[4-(1,3,5-triazin-2-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



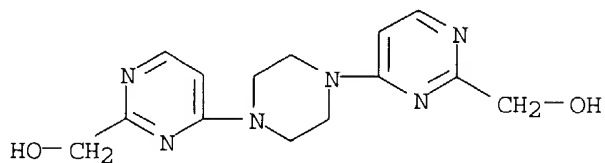
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CN 2-Pyrimidinemethanol, 4-[4-(4,6-dimethyl-2-pyrimidinyl)-1-piperazinyl] - (9CI) (CA INDEX NAME)



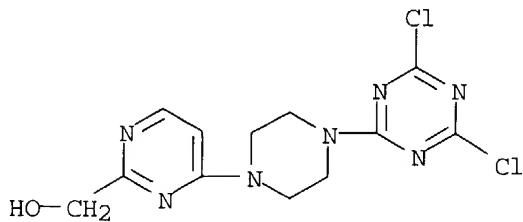
RN 400785-20-8 CAPLUS

CN 2-Pyrimidinemethanol, 4,4'-(1,4-piperazinediyl)bis- (9CI) (CA INDEX NAME)



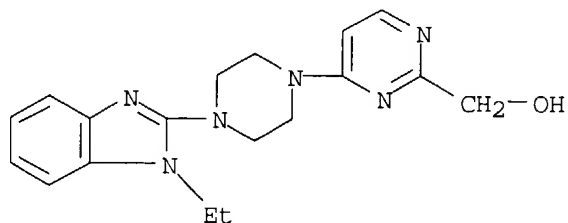
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CN 2-Pyrimidinemethanol, 4-[4-(4,6-dichloro-1,3,5-triazin-2-yl)-1-piperazinyl] - (9CI) (CA INDEX NAME)



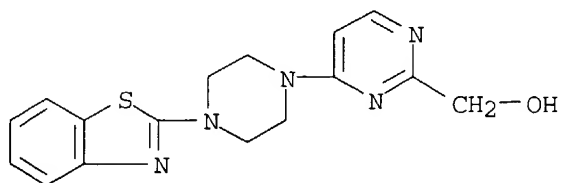
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CN 2-Pyrimidinemethanol, 4-[4-(1-ethyl-1H-benzimidazol-2-yl)-1-piperazinyl] - (9CI) (CA INDEX NAME)



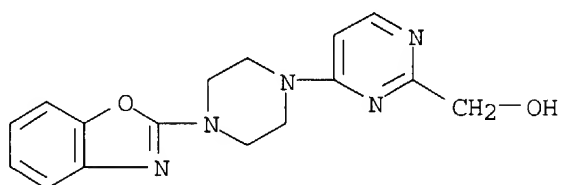
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CN 2-Pyrimidinemethanol, 4-[4-(2-benzothiazolyl)-1-piperazinyl] - (9CI) (CA INDEX NAME)



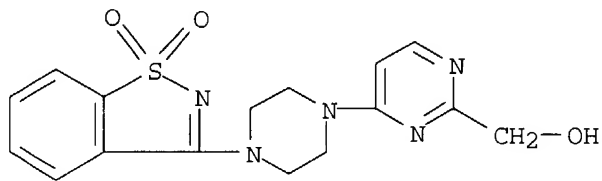
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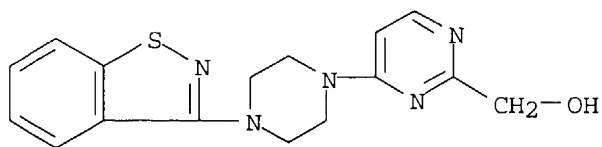
RN 400785-25-3 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(1,1-dioxido-1,2-benzisothiazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



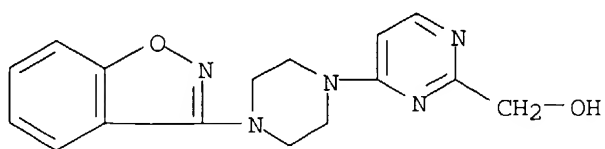
RN 400785-26-4 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(1,2-benzisothiazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



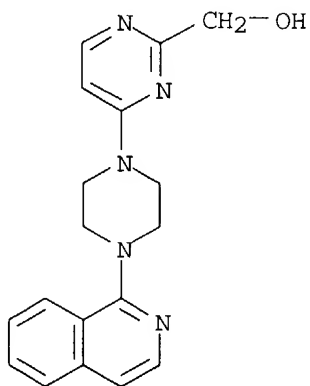
RN 400785-27-5 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(1,2-benzisoxazol-3-yl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



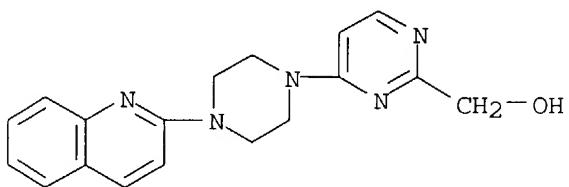
RN 400785-28-6 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(1-isoquinolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



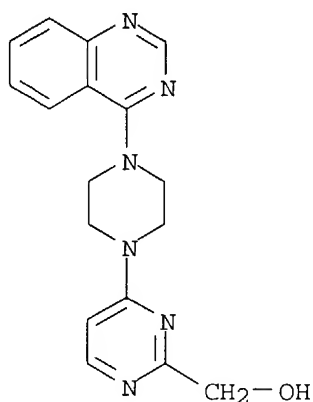
RN 400785-29-7 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(2-quinolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 400785-30-0 CAPLUS

CN 2-Pyrimidinemethanol, 4-[4-(4-quinazolinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



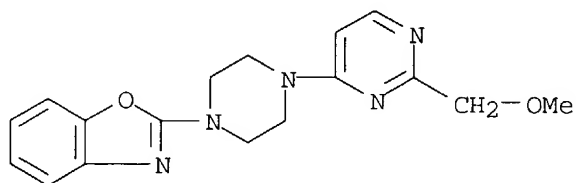
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 400785-07-1P 400785-08-2P 400785-09-3P
 400785-10-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and structure-activity relationships of oral antidiabetic, sorbitol dehydrogenase-inhibiting heterocyclic piperazinopyrimidines)

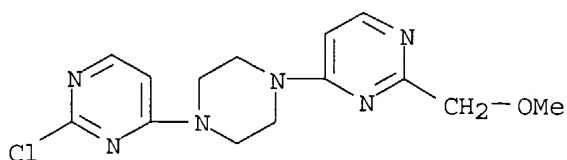
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CN Benzoxazole, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI)
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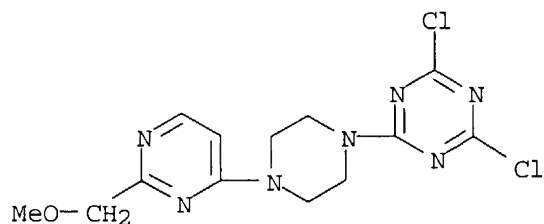
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CN Pyrimidine, 2-chloro-4-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



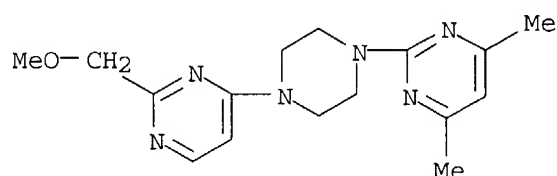
RN 400784-90-9 CAPLUS

CN 1,3,5-Triazine, 2,4-dichloro-6-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



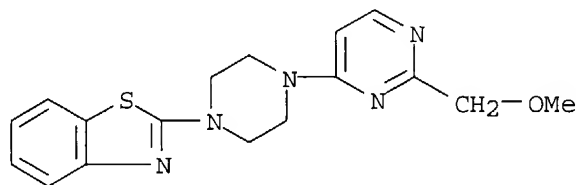
RN 400784-91-0 CAPLUS

CN Pyrimidine, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]-4,6-dimethyl- (9CI) (CA INDEX NAME)



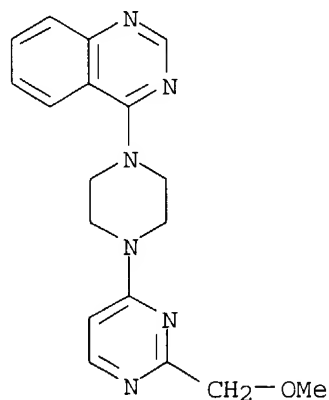
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CN Benzothiazole, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

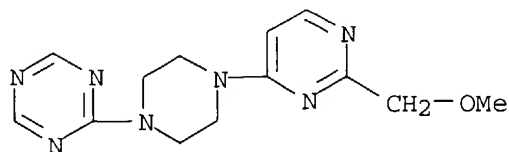


RN 400784-93-2 CAPLUS

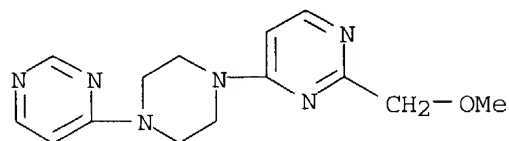
CN Quinazoline, 4-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



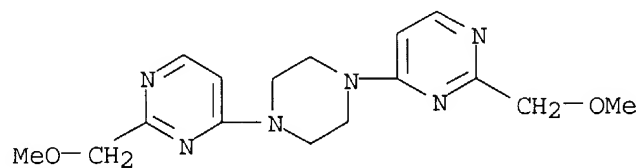
RN 400784-94-3 CAPLUS

CN 1,3,5-Triazine, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]-
(9CI) (CA INDEX NAME)

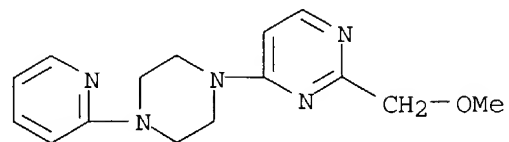
RN 400784-95-4 CAPLUS

CN Pyrimidine, 2-(methoxymethyl)-4-[4-(4-pyrimidinyl)-1-piperazinyl]- (9CI)
(CA INDEX NAME)

RN 400784-96-5 CAPLUS

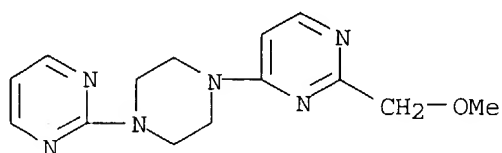
CN Pyrimidine, 4,4'-(1,4-piperazinediyl)bis[2-(methoxymethyl)- (9CI) (CA
INDEX NAME)

RN 400785-01-5 CAPLUS

CN Pyrimidine, 2-(methoxymethyl)-4-[4-(2-pyridinyl)-1-piperazinyl]- (9CI)
(CA INDEX NAME)

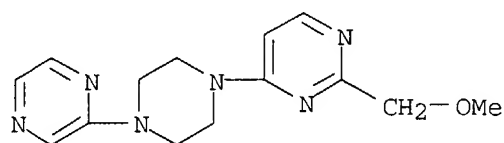
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CN Pyrimidine, 2-(methoxymethyl)-4-[4-(2-pyrimidinyl)-1-piperazinyl]- (9CI)
(CA INDEX NAME)



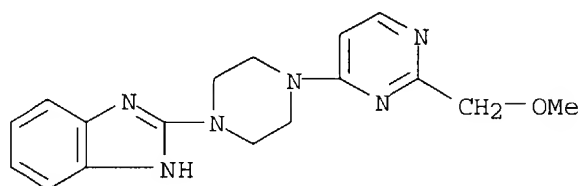
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CN Pyrimidine, 2-(methoxymethyl)-4-(4-pyrazinyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



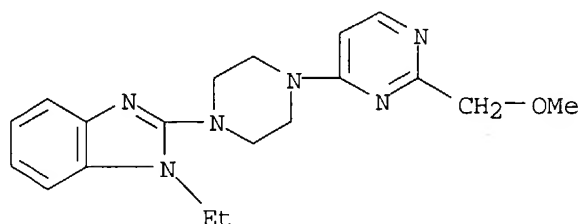
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CN 1H-Benzimidazole, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



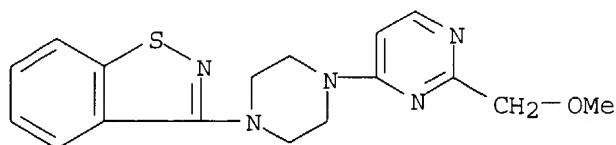
RN 400785-05-9 CAPLUS

CN 1H-Benzimidazole, 1-ethyl-2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)

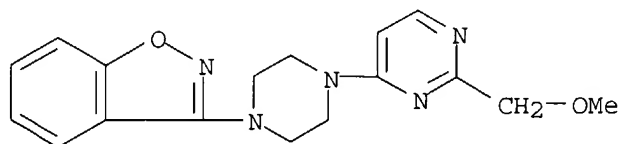


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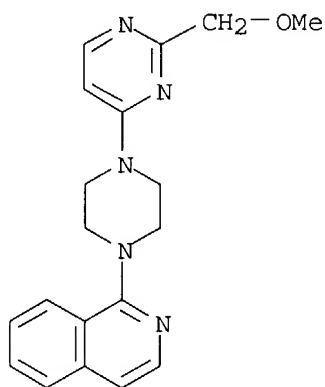
CN 1,2-Benzisothiazole, 3-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



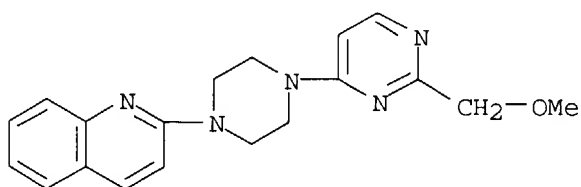
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CN 1,2-Benzisoxazole, 3-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl] -
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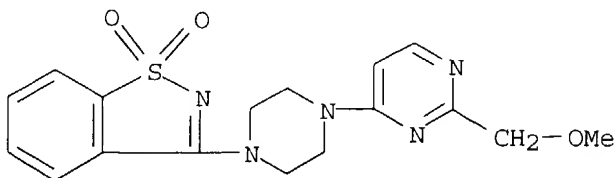
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CN Isoquinoline, 1-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl] - (9CI)
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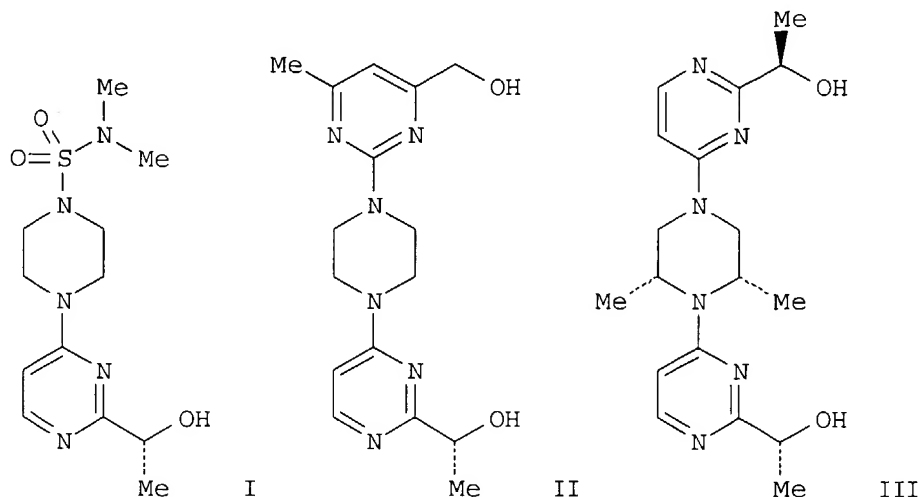
RN 400785-09-3 CAPLUS

CN Quinoline, 2-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl] - (9CI)
(CA INDEX NAME)

RN 400785-10-6 CAPLUS

CN 1,2-Benzisothiazole, 3-[4-[2-(methoxymethyl)-4-pyrimidinyl]-1-piperazinyl] -
, 1,1-dioxide (9CI) (CA INDEX NAME)

GI



AB Optimization of a previously disclosed sorbitol dehydrogenase inhibitor (SDI, I) for potency and duration of action was achieved by replacing the metabolically labile N,N-dimethylsulfamoyl group with a variety of heterocycles. Specifically, this effort led to a series of novel, in vitro potent SDI's, e.g. the [[[hydroxymethylpyrimidinyl]piperazinyl]pyrimidinyl]ethanol II, with longer serum half-lives and acceptable in vivo activity in acutely diabetic rats. However, the desired in vivo potency in chronically diabetic rats, ED₉₀ ≤ 5 mg/kg/day, was achieved only through further modification of the piperazine linker. Several members of this family, including [[(hydroxyethylpyrimidinyl)dimethylpiperazinyl]pyrimidinyl]ethanol III, showed better than the targeted potency with ED₉₀ values of 1-2 mg/kg/day. III was further profiled and found to be a selective inhibitor of sorbitol dehydrogenase, with excellent pharmacodynamic/pharmacokinetic properties, demonstrating normalization of sciatic nerve fructose in a chronically diabetic rat model for .apprx.17 h, when administered orally at a single dose of 2 mg/kg/day.

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:725471 CAPLUS
DN 133:281794
TI Preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors
IN Chu-moyer, Margaret Yuhua; Murry, Jerry Anthony; Mylari, Banavara
Lakshman; Zembrowski, William James
PA Pfizer Products Inc., USA
SO PCT Int. Appl., 328 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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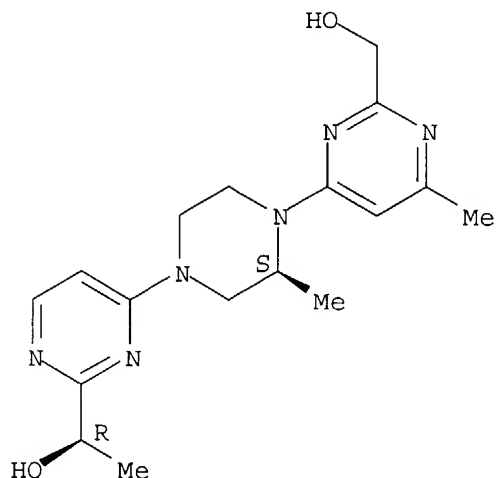
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 US 1999-127437PP 19990401
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 AU 768720 B2 20040108
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 WO 2000-IB296 W 20000316
 NZ 514144 A 20010928 NZ 2000-514144 20000316
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 US 2003-384424 20030310
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 RL: BAC (Biological activity or effector, except adverse); BSU (Biological
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
 BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminopyrimidines as sorbitol dehydrogenase inhibitors)

RN 300548-92-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R) - (9CI) (CA INDEX NAME)

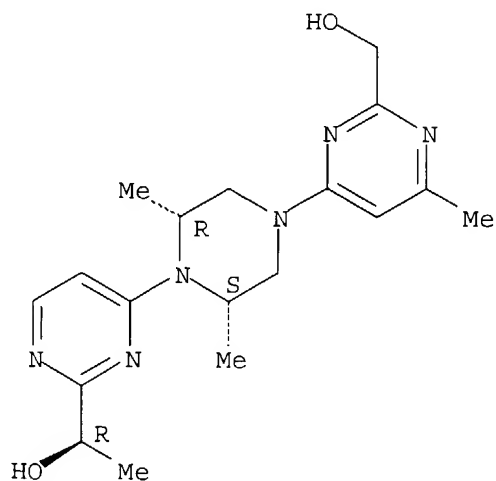
Absolute stereochemistry. Rotation (+).



RN 300549-05-7 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]- α -methyl-, (α R) - (9CI) (CA INDEX NAME)

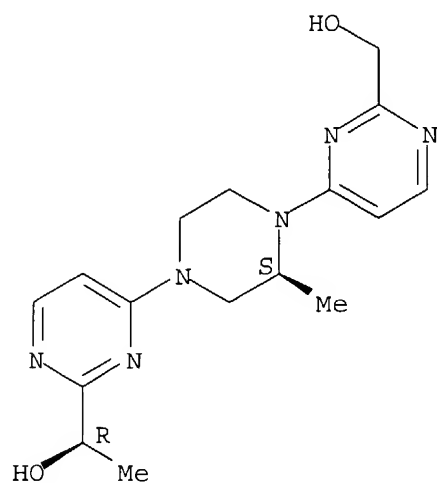
Absolute stereochemistry. Rotation (+).



RN 300549-16-0 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(3S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-3-methyl-1-piperazinyl]- α -methyl-, (α R) - (9CI) (CA INDEX NAME)

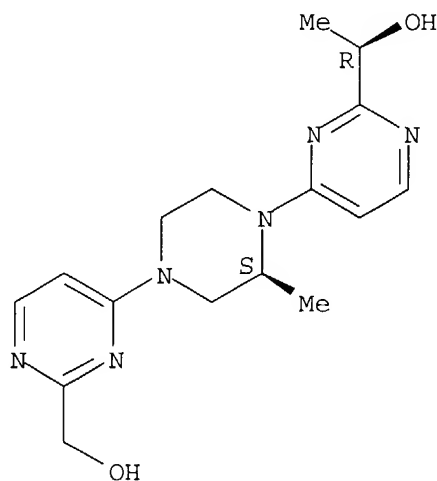
Absolute stereochemistry. Rotation (+).



RN 300549-45-5 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(2S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-2-methyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

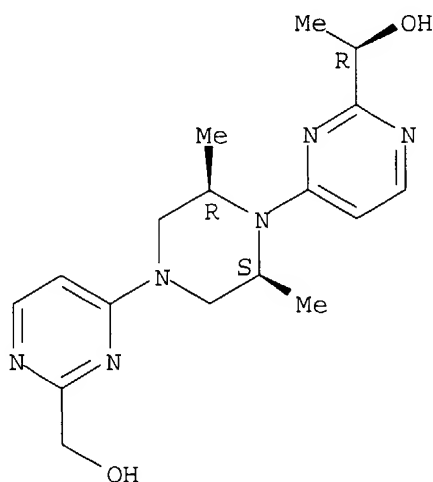
Absolute stereochemistry.



RN 300549-46-6 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(2R,6S)-4-[2-(hydroxymethyl)-4-pyrimidinyl]-2,6-dimethyl-1-piperazinyl]-α-methyl-, (αR)- (9CI) (CA INDEX NAME)

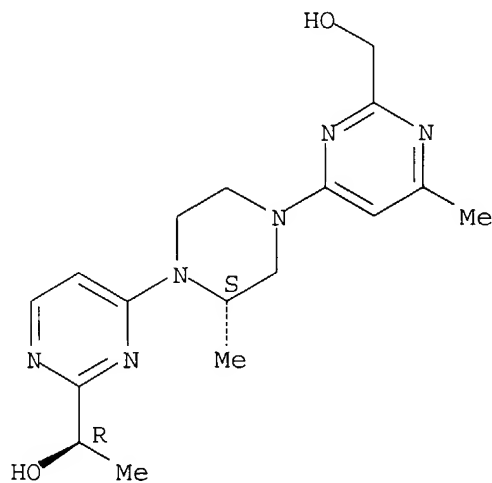
Absolute stereochemistry.



RN 300549-47-7 CAPLUS

CN 2-Pyrimidinemethanol, 4-[(2S)-4-[2-(hydroxymethyl)-6-methyl-4-pyrimidinyl]-2-methyl-1-piperazinyl]- α -methyl-, (α R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = CHO, COMe; COCH2Me, etc.; R2 = H, alkyl, alkoxy; R3 = II-IV, etc.; R23 = CONR25R26, SO2NR25R26 (wherein R25 = H, alkyl, arylalkylenyl; R26 = arylalkylenyl); R24 = H, alkyl, alkoxy, carbonyl, etc.; R27 = H, alkyl; R28, R29 = H, OH, halo, etc.], sorbitol dehydrogenase inhibitors (no data) which are useful in treating or preventing diabetic complications, particularly diabetic neuropathy,

diabetic nephropathy, diabetic microangiopathy, diabetic macroangiopathy and diabetic cardiomyopathy, were prepared and formulated. E.g., a multi-step synthesis of the pyrimidine (R)-V, was given. This invention is also directed to pharmaceutical compns. comprising a combination of the compd.I with an aldose reductase inhibitor and to methods of treating or preventing diabetic complications therewith. This invention is also directed to pharmaceutical compns. comprising a combination of the compound I with an NHE-1 inhibitor and to methods of treating cardiomyopathy and other heart-related problems therewith.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

24.22

180.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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STN INTERNATIONAL LOGOFF AT 11:35:56 ON 24 MAR 2004

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NEWS 11 DEC 08 IMS file names changed
NEWS 12 DEC 09 Experimental property data collected by CAS now available
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NEWS 13 DEC 09 STN Entry Date available for display in REGISTRY and CA/CAPLUS
NEWS 14 DEC 17 DGENE: Two new display fields added
NEWS 15 DEC 18 BIOTECHNO no longer updated
NEWS 16 DEC 19 CROPU no longer updated; subscriber discount no longer
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NEWS 17 DEC 22 Additional INPI reactions and pre-1907 documents added to CAS
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NEWS 18 DEC 22 IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
NEWS 19 DEC 22 ABI-INFORM now available on STN
NEWS 20 JAN 27 Source of Registration (SR) information in REGISTRY updated
and searchable
NEWS 21 JAN 27 A new search aid, the Company Name Thesaurus, available in
CA/CAPLUS
NEWS 22 FEB 05 German (DE) application and patent publication number format
changes
NEWS 23 MAR 03 MEDLINE and LMEADLINE reloaded
NEWS 24 MAR 03 MEDLINE file segment of TOXCENTER reloaded
NEWS 25 MAR 03 FRANCEPAT now available on STN

NEWS EXPRESS MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
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COST IN U.S. DOLLARS

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FULL ESTIMATED COST

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FILE 'REGISTRY' ENTERED AT 11:41:22 ON 24 MAR 2004

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STRUCTURE FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

DICTIONARY FILE UPDATES: 23 MAR 2004 HIGHEST RN 666817-09-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

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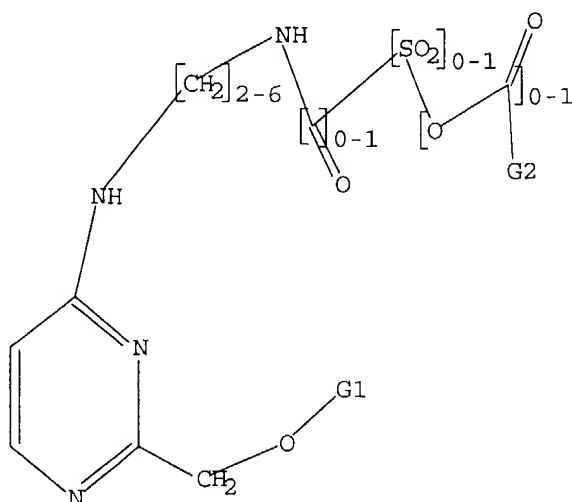
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L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 H, Me, Et, n-Pr, i-Pr, n-Bu, i-Bu, s-Bu, t-Bu, CH₂, Ph

G2 Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

FULL SEARCH INITIATED 11:41:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 975 TO ITERATE

100.0% PROCESSED 975 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.02

L2 0 SEA SSS FUL L1

=> file marpat

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

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155.63

FILE 'MARPAT' ENTERED AT 11:42:01 ON 24 MAR 2004

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FILE CONTENT: 1988-PRESENT (VOL 140 ISS 12) (20040319/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6696581 24 FEB 2004

DE 10317487 19 FEB 2004

EP 1389746 18 FEB 2004

JP 2004059557 26 FEB 2004

WO 2004015164 19 FEB 2004

Structure search limits have been raised. See HELP SLIMIT for the new, higher limits.

=> s l1 sss full

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FULL SCREEN SEARCH COMPLETED - 5721 TO ITERATE

89.4% PROCESSED 5117 ITERATIONS 4 ANSWERS

100.0% PROCESSED 5721 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.32

L3 4 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

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TOTAL

ENTRY

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FULL ESTIMATED COST

109.42

265.05

FILE 'CAPLUS' ENTERED AT 11:42:45 ON 24 MAR 2004

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This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 4 L3

=> d l4 fbib hitstr abs total

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:63992 CAPLUS

DN 134:116237

TI Preparation of bradykinin B1 receptor antagonists

IN Ohlmeyer, Michael H. J.; Baldwin, John J.; Dolle, Roland E., III;

Paradkar, Vidyadhar; Quintero, Jorge Gabriel; Pan, Gonghua

PA Pharmacopeia, Inc., USA

SO PCT Int. Appl., 231 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

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PI   WO 2001005783      A1    20010125      WO 2000-US19185  20000714
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          HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
          LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
          SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
          YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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      US 1999-143990PP 19990715
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      EP 1196411      B1    20030917
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      US 1999-143990PP 19990715
      WO 2000-US19185W 20000714
      JP 2003505384      T2    20030212      JP 2001-511442  20000714
      US 1999-143990PP 19990715
      WO 2000-US19185W 20000714
      AT 250053          E     20031015      AT 2000-950343  20000714
      US 1999-143990PP 19990715
      WO 2000-US19185W 20000714
      US 2003229092      A1    20031211      US 2002-46616  20020114
      US 1999-143990PP 19990715
      WO 2000-US19185A1 20000714
OS   MARPAT 134:116237
GI

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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. I [X, Y, Z = CH or N; A = A1 or A2, where A1 is R4R5NCO (R4 = H, aryl, heteroaryl, substituted alkyl; R5 = H, alkyl), 5-aryl-1,2,4-triazol-3-yl, 2-aryl-4-imidazolyl, or 2-aryl-5-thiazolyl and A2 is R7CONH (R7 = aryl or alkylaryl), R7SO2NH, R4NH, R4O; Q = heteroaryl, aryl, CH2R13 (R13 = OH, OTHP, 1-imidazolyl, 1-pyrrolyl), CH:NOMe, or 1,3-dithian-2-yl; W = H, Cl, F, alkyl, aryl, heteroaryl, alkoxy, alkylthio, an amino group, arylcarbamoyl, etc.; R1 = alkyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, etc.; R2 = H or alkyl or R1R2C is a ring optionally containing O, S or N; R3 = H or alkyl, or when n is zero, R2 and R3 taken together form a 6-membered ring (with provisos)] were prepared as bradykinin B1 receptor antagonists. Thus, D-leucine derivative II was prepared by substitution reaction of D-leucine 4-chlorobenzylamide with 2,4-dichloro-(or difluoro)-6-(1H-imidazol-1-yl)pyrimidine and then 3-chlorobenzylamine. Pharmaceutical formulations containing II are described.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:455465 CAPLUS

DN 129:142534

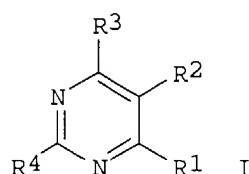
TI Method for processing silver halide photographic material using a developer containing a mercaptopyrimidine

IN Fukui, Kota; Sasaoka, Senzo; Yamada, Kosaburo

PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 44 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 10186596	A2	19980714	JP 1996-340246	19961219
	US 5976758	A	19991102	US 1997-995146	19971219
				JP 1996-340246	19961219

OS MARPAT 129:142534
 GI



AB Claimed method for processing photog. material containing a hydrazine derivative

in an emulsion layer or other hydrophilic colloid layer comprises
 imagewise exposure followed by development with a developer solution of pH
 9.0-10.5 containing ascorbic acid, a 1-phenyl-3-pyrazolidone derivative

(auxiliary

developing agent), a pyrimidine derivative I (R1-4 = H, halo, a group linking
 with the pyrimidine nucleus through C, N, S, or P atom; at least one of
 R1-4 is mercapto group; R1 and R3 are not OH) and not containing
 dihydroxybenzene. The process is free of dihydroxybenzene (hydroquinone)
 which is environmentally toxic, and provides high contrast images by a low
 pH and low replenishment process. Preferable nucleator is a
 polyiminothioether derivative having dialkylamino group at both terminals.
 Preferable developer solution has the pH of ≤11.0 with the
 replenishment rate of ≤180 mL/m². It provides a black-and-white Ag
 image with extremely high contrast and good tonal reproduction quality. Thus,
 a graphic arts film containing an 1-(2-carboxyethylcarbonyl)-2-[4-[3-
 (hexylthioethylureido)phenylsulfoamino]phenyl]hydrazine and
 bis(piperidin-1-yl-ethoxyethyl)thioether was developed by a developer
 solution containing Na erythorbate, 1-phenyl-4-methyl-4-hydroxymethyl-3-
 pyrazolidone and 2,6-dimercaptopyrimidine, and showed the mentioned
 advantages.

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1997:699013 CAPLUS

DN **128:28562**

TI Developer and method for processing of silver halide photographic material

IN Watanabe, Harumi; Sasaki, Hiroto

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 40 pp.

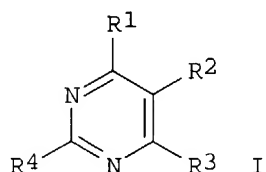
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 09274290	A2	19971021	JP 1996-325522	19961205
OS	MARPAT 128:28562			JP 1996-21280	19960207
GI					



AB The title developer solution contains 0.3-1.5 mol/L a carbonate as main developer and ≥ 1 I (R1-4 = substituent; at least 1 of R1-R4 is mercapto group) preferably 0.01-10 mmol/L. The invention can reduce Ag pollution without affecting photog. properties.

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:780258 CAPLUS

DN **123:169647**

TI Preparation of sulfonylaminopyrimidines as endothelin antagonists.

IN Breu, Volker; Burri, Kaspar; Cassal, Hean-Marie; Clozel, Martine; Hirth, Georges; Loeffler, Bernd-Michael; Mueller, Marcel; Neidhart, Werner; Ramuz, Henri

PA F. Hoffmann-La Roche AG, Switz.

SO Eur. Pat. Appl., 46 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 633259	A1	19950111	EP 1994-109257	19940616
	EP 633259	B1	19990113		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	TW 394761	B	20000621	CH 1993-1924	A 19930628
				TW 1994-83105221	19940608
				CH 1993-1924	A 19930628
	CA 2125730	AA	19941229	CA 1994-2125730	19940613
				CH 1993-1924	A 19930628
	AT 175669	E	19990115	AT 1994-109257	19940616
				CH 1993-1924	A 19930628
	ES 2127850	T3	19990501	ES 1994-109257	19940616
				CH 1993-1924	A 19930628
	ZA 9404434	A	19950103	ZA 1994-4434	19940621
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	IL 110089	A1	20000831	IL 1994-110089	19940622
				IL 1992-101650	A019920420
				CH 1993-1924	A 19930628
	AU 9465948	A1	19950105	AU 1994-65948	19940624
	AU 678467	B2	19970529		
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	HU 67636	A2	19950428	HU 1994-1907	19940624

FI 9403084	A	19941229
NO 9402428	A	19941229
BR 9402558	A	19950328
CN 1106007	A	19950802
CN 1050839	B	20000329
LT 3723	B	19960226
LV 11175	B	19960620
US 5541186	A	19960730
PL 175771	B1	19990226
PL 177031	B1	19990930
RU 2142457	C1	19991210
CZ 287184	B6	20001011
JP 07017972	A2	19950120
JP 2545200	B2	19961016
RO 114325	B3	19990330
SK 280736	B6	20000711

CH 1993-1924	A	19930628
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CN 1994-106574		19940627

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CH 1993-1924	A	19930628
CH 1994-1575	A	19940520
PL 1994-304007		19940627
CH 1993-1924	A	19930628
PL 1994-323036		19940627
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JP 1994-146003		19940628

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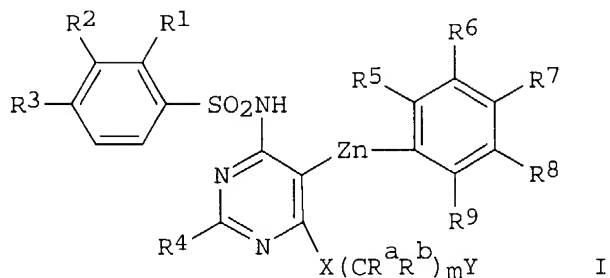
PATENT FAMILY INFORMATION:

FAN 1993:408822

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	EP 510526	A1	19921028	EP 1992-106602	19920416
	EP 510526	B1	19961204		
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				CH 1991-1242	A 19910425
				CH 1992-343	A 19920206
RU 2083567	C1	19970710	RU 1992-5011295		19920131
			CH 1991-1242	A	19910425
US 5270313	A	19931214	US 1992-869274		19920415
			CH 1991-1242	A	19910425
			CH 1992-343	A	19920206
AU 9214976	A1	19921029	AU 1992-14976		19920416
AU 652238	B2	19940818			
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			CH 1992-343	A	19920206
ZA 9202832	A	19930127	ZA 1992-2832		19920416
			CH 1991-1242	A	19910425
AT 145898	E	19961215	AT 1992-106602		19920416
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			CH 1992-343	A	19920206
ES 2096673	T3	19970316	ES 1992-106602		19920416
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IL 101650	A1	19961016	IL 1992-101650	19920420
			CH 1991-1242	A 19910425
			CH 1992-343	A 19920206
HU 61289	A2	19921228	HU 1992-1329	19920421
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JP 05155864	A2	19930622	JP 1992-126708	19920421
JP 06070021	B4	19940907		
			CH 1991-1242	A 19910425
			CH 1992-343	A 19920206
NO 9201609	A	19921026	NO 1992-1609	19920424
			CH 1991-1242	A 19910425
			CH 1992-343	A 19920206
CA 2067288	AA	19921026	CA 1992-2067288	19920427
			CH 1991-1242	A 19910425
			CH 1992-343	A 19920206

OS MARPAT 123:169647
GI



AB Title compds. (I; R1-R3 = H, alkyl, alkoxy, alkylthio, alkenyl, halo, CF₃, hydroxyalkoxy, haloalkoxy, alkanoylalkyl, hydroxyalkyl, CO₂H, amino, etc.; R2R3, R5R6, R6R7 = butadienyl, methylenedioxy, ethylenedioxy, isopropylidenedioxy; R4 = H, alkyl, cycloalkyl, CF₃, alkoxy, alkynyloxy, alkylthio, alkylthioalkyl, hydroxyalkyl, dihydroxyalkoxy, alkylsulfinyl, alkylsulfonyl, aryl, arylthio, aryloxy, heterocyclyl, heterocyclylalkyl, etc.; R5-R9 = H, halo, CF₃, alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl; R_a, R_b = H, alkyl, alkoxy, alkylthio; X = O, S, NH; Y = O₂CNR₁₀R₁₁, HNOCNR₁₀R₁₁, O₂COR₁₀, HNCOR₁₀; R₁₀ = alkyl, cycloalkyl, hydroxyalkyl, carboxyalkyl, alkoxycarbonylalkyl, alkanoyloxyalkyl, arylcarbamoylealkyl, heterocyclyl, heterocyclylalkyl, etc.; R₁₁ = H, R₁₀; m = 1-3; n = 0,1), were prepared. Thus, 2-pyridinecarbonyl azide was heated in PhMe; 4-tert-butyl-N-[6-(2-hydroxyethoxy)-5-(2-methoxyphenoxy)-2,2'-bipyrimidin-4-yl]benzenesulfonamide was added to give pyridine-2-carbaminic acid, 2-[6-(4-tert-butylphenylsulfonylamino)-5-(2-methoxyphenoxy)-2,2'-bipyrimidin-4-yloxy]ethyl ester. The latter at 30 mg/kg orally in rats gave a 30% reduction in average arterial blood pressure.

=> log y

COST IN U.S. DOLLARS

SINCE FILE

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FULL ESTIMATED COST

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282.39

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

Patel

<3/24/2004>